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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,868	03/12/2004	Jin Sheng Lai	3079/214	6614
23429 7590 07/09/2008 LOWE HAUPTMAN HAM & BERNER, LLP 1700 DIAGONAL ROAD SUITE 300 ALEXANDRIA, VA 22314				
EXAMINER STAFFORD, PATRICK				
ART UNIT 2828		PAPER NUMBER		
NOTIFICATION DATE 07/09/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

### Office Action Summary

**Application No.**

10/798,868

**Applicant(s)**

LAI, JIN SHENG

**Examiner**

PATRICK STAFFORD

**Art Unit**

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

Claims 1-4 amended 27 March 2008.

### ***Response to Arguments***

Applicant's arguments filed 27 March 2008 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the short pulse for additional energy supplies) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicants argument that '422 does not teach a preset pulse is used to charge said laser system to increase reaction speed of said laser, '422 teaches a preset pulse is used to charge said laser system to increase reaction speed of said laser (col. 4, lines 14-19).

In response to applicant's argument that Nagamine '422 does not teach the table indexed by laser off time, and the reference table used for recording compensation power value required for each corresponding one of the reaction time values, Nagamine '422 teaches a table indexed by laser off time (col. 4, lines 14-19), and the reference table used for recording compensation power value required for each corresponding one of the reaction time values (col. 4, lines 30-34).

In response to applicant's argument that the method taught by Nagamine '422 would be inefficient, a recitation of the intended use of the claimed invention must result in a structural

difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim, regardless of efficiency.

In response to applicant's argument that '422 does not teach dividing the unstable working area into n sections, '422 teaches an unstable working area is divided into n sections n is an integer larger than 1 (col. 4, lines 2-4).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant's amendment states "...providing a short pulse by the table indexed by a laser off time before the laser energizing the laser to increase the reaction speed of the laser...."

This amendment will be interpreted as "before laser outputting, a short pulse by the table indexed by laser off time is used to energize laser to increase reaction speed of said laser" for the purposes of applying prior art. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagamine et al (U.S.

Patent 4,937,422, hereafter '422).

Claim 1: '422 teaches a control and compensation method to compensate power of a laser output within an unstable working area for obtaining consistence of energy as in a stable working area (col. 1, lines 56-60), said method comprising the steps of:

providing a reference table and recording compensation power values required for each corresponding one of reaction time values in the reference table (col. 4, lines 38-46); and

before laser outputting, a short pulse by the table indexed by laser off time is used to energize laser to increase reaction speed of said laser (col. 4, lines 14-19); and

dividing an unstable working area into a plurality of sections, wherein each of the sections represents a reaction time value (col. 4, lines 30-34), and using the reference table and compensating the power value for each corresponding one of the reaction time values (col. 4, lines 38-46); so that when the laser output is within the unstable working area, its power is compensated in reference to the reference table for various positions of the sections (col. 4, lines 38-46).

Claim 2: '422 teaches the control and compensation method according to claim 1, wherein said unstable working area is divided into n sections and n is an integer larger than 1 (col. 4, lines 2-4).

Claim 3: '422 teaches the control and compensation method according to claim 1, wherein said compensation power value is determined in corresponding to one of said reaction time values (col. 4, lines 30-34).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagamine et al (U.S. Patent 4,937,422, hereafter '422) in view of Barbour et al (U.S. Patent 6,318,828, hereafter '828).

'422 teaches the control and compensation method according to claim 1, wherein

a. upon starting emission of said laser, said laser is in a low energy state, a preset pulse is used to charge said laser system to increase reaction speed of said laser (col. 4, lines 14-19);

b. then power of said laser outputting is compensated in reference to said reference table (col. 4, lines 38-46);

c. when said laser outputting is kept on within said unstable working area, said power is automatically compensated in reference to said reference table by automatically checking out positions of said sections following increasing of work output (col. 4, lines 38-46);

d. when said laser outputting passes over said unstable working area to said stable working area, said corresponding one of said reaction time values is a constant value, and compensation stops and normal energy output is maintained (col. 4, lines 38-46).

'422 does not explicitly teach the width of said pulse is determined by a time when said laser system is turned off. However, '828 teaches the width of said pulse is determined by a time

when said laser system is turned off (col. 26, lines 59-63) in order to calibrate the system.

Therefore, it would have been obvious to one of ordinary skill in that art at the time the invention was made to determine the pulse width by a time when the laser system is turned off in order to calibrate the system.

### ***Conclusion***

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PATRICK STAFFORD whose telephone number is (571)270-1275. The examiner can normally be reached on M-Th 7:30-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MinSun Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. S./  
Examiner, Art Unit 2828

/Minsun Harvey/  
Supervisory Patent Examiner, Art Unit 2828